Hall C Target Operator Essential Responsibilities

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Abstract

This document outlines the responsibilities of the target operator. It summarizes the minimum understanding of the system required to safely operate and monitor the Hall C cryotarget.

Emergency Contacts

The following personnel are available for help with the system. Please observe the calling order as given in this table.

Name	work Ph	Pager	Home Ph
G.Smith	5405	584-5405	565-9883
M. Seely	5036	584-5036	223-1216
D. Meekins	5434	584-5434	874-4750
C. Keith	5878	584-5878	596-3002

Essential Responsibilities

Power-requirements At the beginning of the shift the target operator should determine the power load on the targets (the beam off power of the high power heater in each loop). He/she should also verify with the shift leader that the present settings will be compatible with the shift's program.

Alarm-handler At the beginning of the shift the target operator must verify that there is a working alarm handler available from every workspace of the window manager.

Configuration At the beginning of the shift the target operator should make sure that he/she understands the configuration of the system. This includes the mapping of loops to cryogens and the goal temperatures for each cryogen's control loop. In addition the status of all the motion mechanisms should be checked (which target, if any, is in the beam).

Checklist Make a picture of the target GUIs and stick them in the logbook.

- **logging** The target operator must verify that the data logging is on at the beginning of each shift.
- ioc-reboots All ioc reboots must be entered in the electronic logbook, preferably with the keyword-target ioc reboot.
- alarm-servicing All alarms must be serviced from the lowest level in the tree. This will insure that the operator can identify the parameter which is outside normal operations bounds. All nuisance alarms should be reported to an "expert" (see call list above). The expert will determine if the limits should be changed or if a hardware fix is needed. Do Not Change Alarm Set Points without consulting an expert.
- target-motion It is necessary to contact MCC prior to making any target motion. The target operator must know the appropriate beam current limits for each target, or how to find them.

Required Knowledge

The tasks listed below should be second nature to any trained operator:

- **Target-motion** All operators must be able to use the various target motion GUI's.
- ioc-reboot All target operators must be able to recognize the common symptoms of a sick ioc and be able to perform a reboot, and restore GUI operations to normal (ie, alarm handlers, etc.).
- **alarm-handling** All target operators must be able to properly service alarms.
- heatload-adjustment All target operators must be able to adjust the heat load of a target to match the running conditions. This involves the high-power heater limits, the JT-valves and the fan frequency.
- GUI All target operators must be able to log into the controls Linux computer and start the GUI and charts.